

**Meeting Between Staffs of the Federal Reserve Board, the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), and  
The Clearing House  
October 12, 2017**

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David Wagner (The Clearing House); Ganesh Radhakrishnan (Bank of America); John Feraca, Craig Jones (Barclays); Tiffany Eng (Goldman Sachs); Beth Cleland (JP Morgan Chase); Katherine Clune, Michael Formichelli, Andrew Nash (Morgan Stanley); Sarah Flowers, Benjamin Weiner (Sullivan & Cromwell)

**Summary:** Staffs of the Federal Reserve Board, OCC, and FDIC met with representatives of The Clearing House and various banking organizations to discuss the notice of proposed rulemaking to establish the Net Stable Funding Ratio (NSFR) in the United States. Specifically, the representatives discussed the treatment of trade date receivables, including the required stable funding factor applied to trade date receivables that have failed to settle, under the proposed NSFR.

Attachment

# NSFR Treatment of Trade Date Receivable Fails

August 21, 2017



# Table of Contents

## OVERVIEW OF FAILS AND NSFR

Proposed NSFR Treatment of Trade Receivable Fails	3
What are “Fails”?	4
Anatomy of a Fail	5
Application of Proposed NSFR	6
Fails Settle Quickly	7

## APPROACHES TO FAILS

Regulatory Approaches to Fails	8
Scaling of Regulatory Fails Penalties	10
Economics of Fails	11

## CONCLUSION

Recommendation	12
Summary Rationale	13

## APPENDIX

Appendix A: Basel vs. EU vs. US Draft Language	14
Appendix B: Continuous Net Settlement (“CNS”)	15
How CNS Works	16



# Proposed NSFR Treatment of Trade Date Receivable Fails

- The proposed U.S. NSFR would assign a 100% RSF factor to any trade date receivable from the sale of a security that has failed to settle within the lesser of the market standard settlement period and five business days, even when such trades are expected to settle.
- This is inconsistent with the Basel and E.U. approaches to the NSFR, which assign a 0% RSF to such trade date receivables which have failed to settle but which are still expected to settle.
- **Recommendation:**
  - Assign a 0% RSF factor to trade date receivables due from the sale of a security that fail to settle within the lesser of the market standard settlement period and five business days, but that are still expected to settle.



# What are “Fails”?

- Delivery Fails occur when a trade fails to settle on schedule. There are two parties to every fail:
  - FTD Side: one party fails to deliver the security (a “fail to deliver” or a “FTD”).
    - Balance Sheet Asset: Receivable (Contract Price)
    - Balance Sheet Liability: Payable (MtM)
  - FTR Side: one party fails to receive the security (a “fail to receive” or a “FTR”)
    - Balance Sheet Asset: Receivable (MtM)
    - Balance Sheet Liability: Payable (Contract Price)

Seller (FTD)		Buyer (FTR)	
Asset	Liability	Asset	Liability
\$100 (Receivable)	MtM (Payable)	MtM (Receivable)	\$100 (Payable)

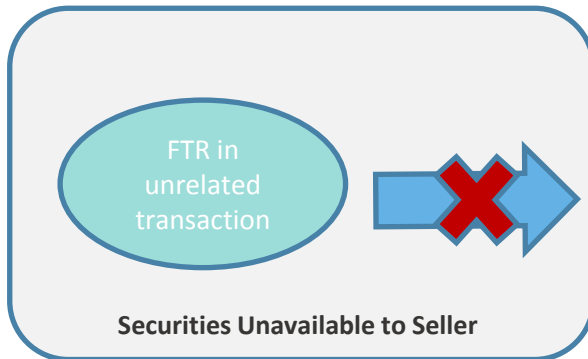
**Illustrative trade date accounting of an equity trade involving 100 shares of ABC Co. at a contract price of \$1 per share.**

**A 100% RSF applies to the receivable due to an institution resulting from the institution’s sale of securities (FTD side).**

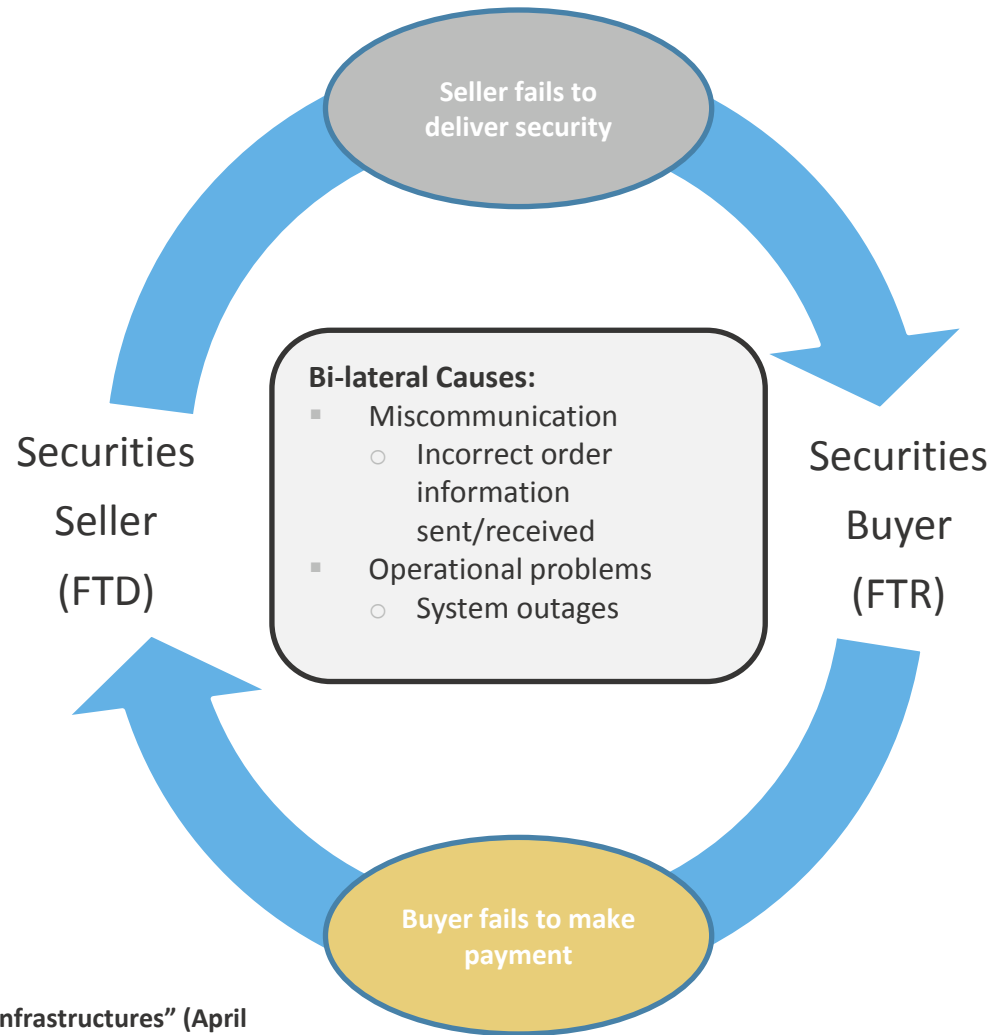


# Anatomy of a Fail

Many settlement systems operate on a delivery vs payment (DvP) basis, where delivery of a security occurs if and only if payment occurs.\*



Transactions settled through NSCC's Continuous Net Settlement system offset the risks of fails through the use of a Central Counter Party and net settlement. See [Appendix B](#).



\*Source: See BCBS, "Principles for financial market infrastructures" (April 2012).

# Application of Proposed NSFR

- The Proposed NSFR would result in Firms taking on long-term debt to fund short-term fails receivables.
- A 100% RSF on fails is disproportionate to the funding requirements of the underlying securities.
  - Example:
    - Bank holds \$100 UST inventory (5% RSF = \$5 RSF)
    - Bank executes sale of \$100 UST inventory for cash
    - Transaction has not settled as of T+2
    - As of T+2, Bank has a receivable past the market standard settlement period (100% RSF = \$100 RSF)
- NSFR funding requirements on failed UST deliveries would be 20x the funding requirement on the USTs themselves.
  - Bank has no real funding risk on a transaction-by-transaction basis, since it can execute an alternate sale or “sellout”.
  - Existing broker-dealer regulatory framework already applies fails charges to dis-incentivize fails.
- Similar dynamics apply in the case of equity and corporate debt markets.
  - Increases in RSF from 50% or 85% to 100% are unjustified.
  - As with USTs, existing broker-dealer regulatory framework already applies fails charges to dis-incentivize fails.
- Due to the short-term volatility of fails, quarter-end spot NSFR disclosure could be misleading if a 100% RSF is applied to fails.



# Fails Settle Quickly

- Most fails across product types settle within 5 business days, and under BAU conditions over the twelve-month dynamic of the NSFR do not impact overall market liquidity.
- Counterparties are incentivized to resolve fails quickly due to existing regulatory capital, credit, and customer protection charges, the risk of buy-ins and the cost of fines (see below).
- Because market structure/incentives already cause fails to be resolved quickly:
  - Fails do not have negative long-term funding effects and should not be penalized in the NSFR calculation; and
  - No additional market discipline needs to be imposed by the NSFR calculation.





# Regulatory Approaches to Fails

- Basel III Standardized BHC Capital Requirements
  - Risk weights of 100-1,250% for unsettled transactions (FTD/FTR) aged 5 business days past settlement and beyond
  - Risk weights are scaled to the age of the fail
    - For DvP transactions, the scaled risk weights are applied to the positive current exposure (the excess of the settlement price over the current market price for the transaction), not the gross amount of the unsettled transaction
- Broker-Dealer Regulation
  - SEC
    - Rule 15c3-1 capital charges on aged fails
      - FTDs, aged 5 business days and older
      - FTRs, aged 30 calendar days and older
    - Rule 15c3-3
      - Customer protection reserve calculation
      - Buy-in requirement for (a) securities due from customer on long sales over 10 days old and (b) FTRs aged 30+ calendar days when the BD has a “deficit” on insufficient customer securities
    - Regulation SHO restrictions on naked short selling of U.S. equities
      - Rule 204: Buy-in requirement for NSCC clearing firms for fails prior to T+4 (short sales) or T+6 (long sales)
  - SRO/CCP Rules and Procedures
    - FINRA Rule 11810: A fail may be closed by either party on the third business day following the date delivery was due
    - FINRA Rule 11820: Seller may sell out position if Buyer fails to accept delivery
    - NSCC Buy-in Procedures



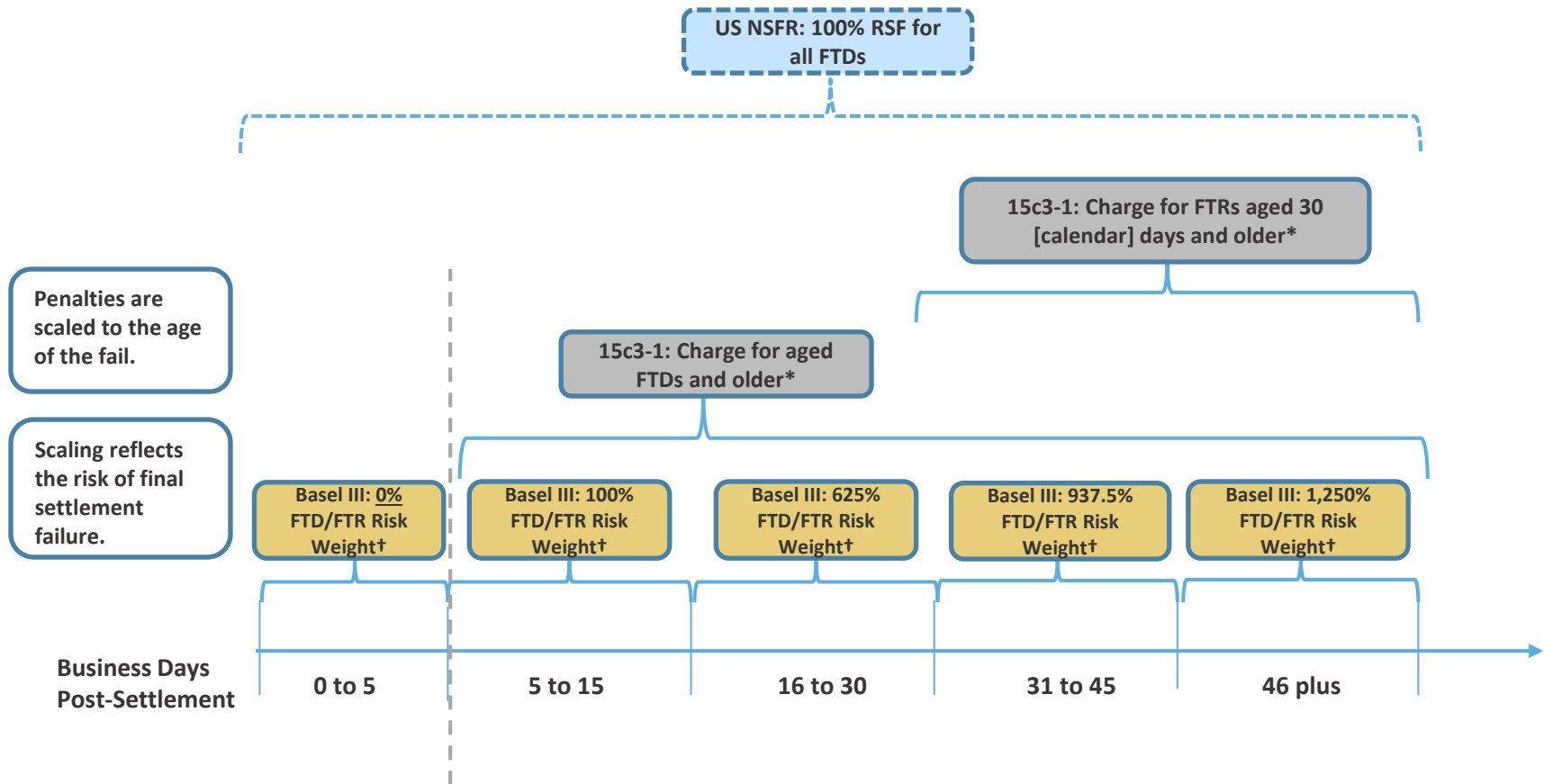
# Regulatory Approaches to Fails (continued)

- Regulation SHO deters naked short selling by:
  - Imposing marking and “circuit breaker” requirements (restricting the price at which certain short sales may be effected);
  - Prohibiting acceptance of a short sale order unless the broker reasonably believes that the security can be borrowed and delivered; and
  - Imposing close-out requirements on short sales (T+4 settlement) and long sales (T+6 settlement)
- The FRBNY Treasury Market Practices Group's (“TMPG”) also prescribes best practices guidelines that require Primary Dealers to penalize FTDs by reducing the invoice price to be paid for FTDs at a penalty rate that begins to accrue as of the date of the fail.
  - US Treasuries & Agencies: a penalty rate equal to the greater of: a) 0%, and b) 3% per annum, minus the Fed Funds rate; and
  - Agency MBS: a penalty rate equal to the greater of: a) 0%, and b) 2% per annum, minus the Fed Funds rate.
  - Penalties are an out-of-pocket cost to the party failing to deliver.
- The FRBNY’s Primary Dealer Compliance Program requires that all Primary Dealers certify compliance with the TMPG best practice guidelines annually.

**Sources:** Operating Policy: Administration of Relationships with Primary Dealers (Mar. 24, 2016), available at: [https://www.newyorkfed.org/markets/pridealers\\_policies.html](https://www.newyorkfed.org/markets/pridealers_policies.html); TMPG, Publications, Settlement Fails, available at: [https://www.newyorkfed.org/tmpg/settlement\\_fails.html](https://www.newyorkfed.org/tmpg/settlement_fails.html); TMPG, U.S. Treasury Securities Fails Charge Trading Practice, available at: <https://www.newyorkfed.org/medialibrary/microsites/tmpg/files/Fails-Charge-Trading-Practice-2016-07-13.pdf>.



# Scaling of Regulatory Fails Penalties



\*Note: Rule 15c3-1 excludes all fails on continuous net settlement systems from capital charges.

†Note: Basel III RWA for unsettled transactions excludes: (1) cleared transactions that are marked-to-market daily and subject to daily receipt and payment of variation margin; (2) repo-style transactions; (3) one-way cash payments on OTC derivative contracts; or (4) transactions with a contractual settlement period that is longer than the normal settlement period, which is defined as the lesser of market standard or 5 business days). For DvP transactions, the scaled risk weights are applied to the positive current exposure (the excess of the settlement price over the current market price for the transaction), not the gross amount of the unsettled transaction.



# Economics of Fails

<b>Risk</b>	<ul style="list-style-type: none"> <li>• The primary risk for fails is the risk of loss in the event of counterparty insolvency.</li> <li>• Since most fails are fully collateralized, the risk of loss is reduced to the net change in the MtM value of the securities position. Such risks are already addressed by operational charges for broker-dealers (see above).</li> <li>• If either buyer or seller has to replace the transaction at a loss due to MtM change in the value of the security, it may be able to recover the loss from the bankrupt counterparty.</li> </ul>
<b>Cost</b>	<p>The <u>Seller</u> bears the principal <u>cost</u> of a fail, i.e., the seller loses the time value of the contract price over the duration of the fail.</p>
<b>Benefit</b>	<p>The <u>Buyer</u> receives an offsetting <u>benefit</u>, since a buyer with an FTR can invest the contract price until settlement.</p>
<b>Policy</b>	<ul style="list-style-type: none"> <li>• The risk of loss associated with fails is bilateral and generally limited to the net MtM change in value of the securities position.</li> <li>• The Seller (FTD) is incentivized to deliver, since the Seller bears the primary cost of a fail.</li> <li>• Assigning a 100% RSF to trade date receivables due to sales of securities that have failed to settle is too punitive given economic risks, costs, and incentives.</li> </ul>

**Sources:** See Federal Reserve Bank of New York (FRBNY), [Guide to FR2004 Settlement Fails Data](#); Explaining Settlement Fails, *Current Issues in Economics and Finance*, Vol. 11, No. 9 (FRBNY, Sept. 2005).



# Recommendation

- Assign a 0% RSF factor to fails that are still expected to settle.
- Recommended language for § \_\_\_\_.106(a)(1)(v):
  - “(1) Unencumbered assets assigned a zero percent RSF factor . . . (v) A trade date receivable due to the [BANK] resulting from the [BANK]’s sale of a financial instrument, foreign currency, or commodity that is required to settle within the lesser of the market standard settlement period, without extension, for the particular transaction and five business days from the date of the sale, and that **either** has not failed to settle within the required settlement period **or has failed to, but is still expected to, settle.**”



# Summary Rationale

- An RSF should not be assigned to fails (FTDs) that are expected to settle.
  - Existing regulatory frameworks
    - Risks associated with FTDs and FTRs are addressed by risk-based capital and broker-dealer regulation.
    - Unlike the proposed U.S. NSFR, such regulation is scaled to the incremental risk of fails as the positions age.
  - Reduced funding risk
    - Most fails settle within 5 business days of the original settlement date.
    - Most transactions are settled on a DvP basis—funds are not transferred until delivery.
    - For most broker-to-broker transactions, CNS mitigates the causes and effects of failing (see [Appendix B](#)).
  - Unintended Consequences
    - The U.S. NSFR Proposal results in absurd outcomes — e.g., U.S. Treasuries receive a 5% RSF; however, a fail on the sale of the same U.S. Treasuries receives a 100% RSF.



## Appendix A: Basel vs. EU vs. US Draft Language

Basel

Basel NSFR, Para. 36. Assets assigned a 0% RSF factor comprise: . . . (d) “trade date” receivables arising from sales of financial instruments, foreign currencies and commodities that (i) are expected to settle within the standard settlement cycle or period that is customary for the relevant exchange or type of transaction, **or (ii) have failed to, but are still expected to, settle.**

EU

EU COM (2016)(850), Article 428r(1): The following assets shall be subject to a 0% required stable funding factor: . . . (e): trade date receivables arising from sales of financial instruments, foreign currencies and commodities that are expected to settle within the standard settlement cycle or period that is customary for the relevant exchange or type of transaction **or that have failed to, but are still expected to, settle . . .**

US

US Proposed § \_\_\_\_.106(a)(1)(v): (1) Unencumbered assets assigned a zero percent RSF factor . . . (v) A trade date receivable due to the [BANK] resulting from the [BANK]’s sale of a financial instrument, foreign currency, or commodity that is required to settle within the lesser of the market standard settlement period, without extension, for the particular transaction and five business days from the date of the sale, **and that has not failed to settle within the required settlement period.**



## Appendix B: Continuous Net Settlement (“CNS”)

- DTCC and its subsidiaries (NSCC, DTC, FICC, GSCC) clear and settle virtually all broker-to-broker equity and corporate, municipal debt, and U.S. treasury securities transactions in the United States.\*
- CNS limits fails due to miscommunication and limits ‘daisy chain’ and ‘round robin’ fails.
- NSCC becomes the central counterparty for all obligations
- Trades scheduled to settle through DTC/FICC are netted with failed positions to result in a single obligation (to deliver or receive) for each member every day.
  - If securities are available, they are automatically transferred.
  - If securities are unavailable, members receive a transferrable ‘IOU’ that receives an age-based priority for future settlement.

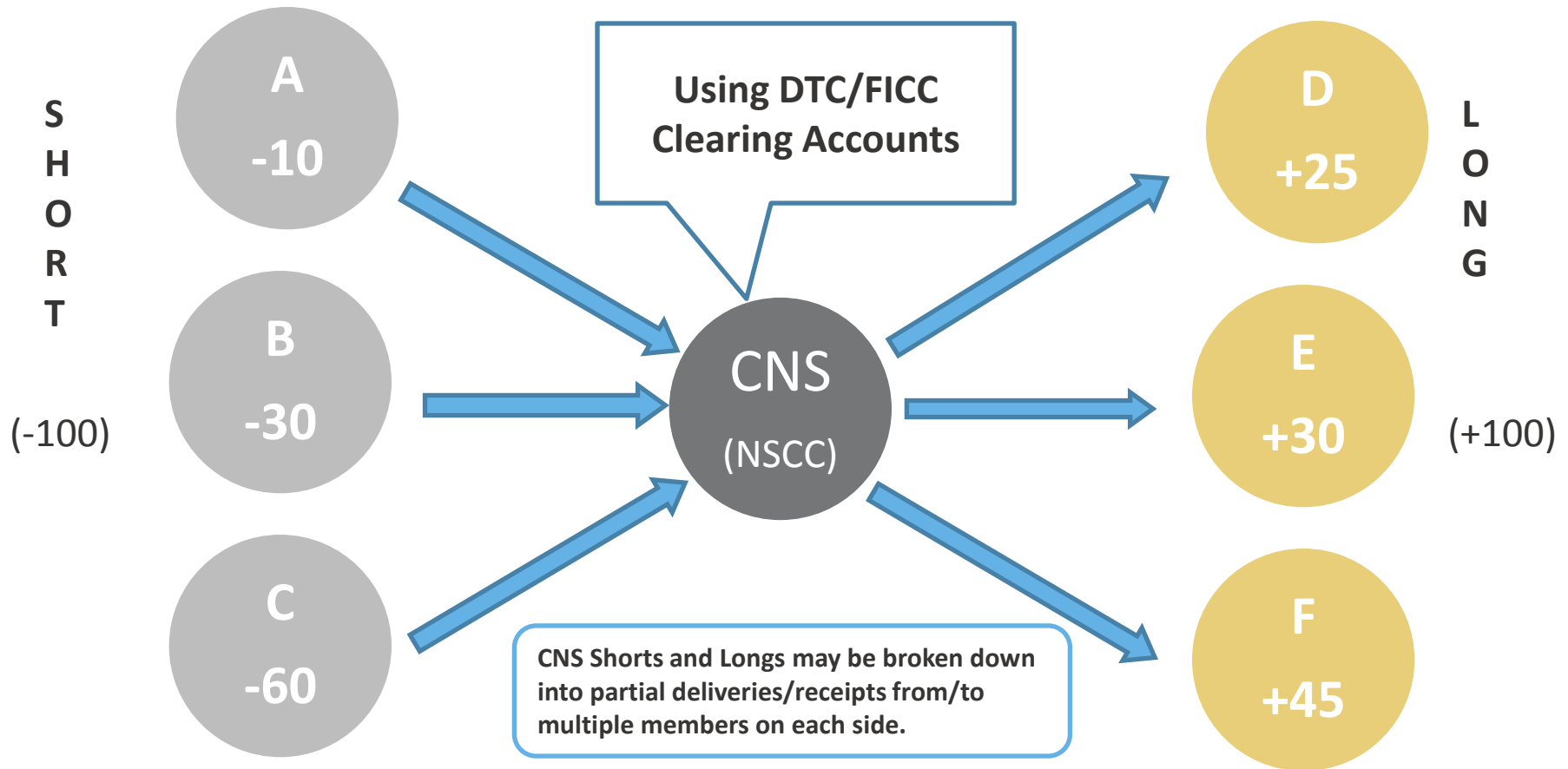
\*Depository Trust & Clearing Corporation (“DTCC”), National Securities Clearing Corporation (“NSCC”), Depository Trust Company (“DTC”), Fixed Income Clearing Corporation (“FICC”), Government Securities Clearing Corporation (“GSCC”)

Sources: DTCC, “CNS Settlement as Delivery versus Payment in DTC (CNS for Value)” (Sept. 2011); DTCC, “Disclosure under the Principles for Financial Market Infrastructures” (Dec. 2016); DTCC, “CNS”, available at: <http://www.dtcc.com/clearing-services/equities-clearing-services/cns>; FRBNY, Guide to FR2004 Settlement Fails Data; Talis J. Putnins, “Naked short sales and fails to deliver: An overview of clearing and settlement procedures for stock trades in the US,” *Journal of Securities Operations and Custody* 2.4 (2009-2010).





# How CNS works



Source: DTCC, "CNS Settlement as Delivery versus Payment in DTC (CNS for Value): An initiative of The National Securities Clearing Corporation and The Depository Trust Company: A white paper to the industry" (Sept. 2011).

